

AMENDMENTS TO THE CLAIMS

1. (Previously presented): A system for controlling transmission of data packets through an information network, comprising:

a Regional Transaction Processor (RTP); and

a Data Enabling Device (DED) operable to:

receive one or more data packets from the information network,

detect when the one or more data packets include content match information,
and

issue a message to a workstation and invoke the RTP to process a transaction

when the content match information is detected in the one or more data packets, wherein the DED is operable to prevent further transmission of the one or more data packets based on the content match information.

2. (Original): The system as set forth in claim 1, wherein the transaction processed is based on the content match information.

3. (Original): The system, as set forth in claim 1, wherein the DED is operable to detect when the one or more data packets include content match information at a rate proportional to the rate at which the data packets are received.

4. (Canceled)

5. (Original): The system, as set forth in claim 1, wherein the RTP comprises a network server and a database, and is operable to process transactions for requests for content.

6. (Original): The system, as set forth in claim 1, wherein the DED is located at a network access point (NAP).

7. (Original): The system, as set forth in claim 1, further comprising a plurality of DEDs along a network route, wherein each DED is operable to communicate with at least one of the other DEDs.

8. (Original): The system, as set forth in claim 7, wherein the plurality of DEDs include a first DED that generates a message and one or more intermediate DEDs operable to forward the message to the DED closest to the workstation along the network route.

9. (Original): The system, as set forth in claim 7, wherein the plurality of DEDs are operable to communicate with each other to prevent transmitting more than one message for the same data packet through the network route.

10. (Original): The system, as set forth in claim 1, wherein the RTP transmits a Release_Content or Cease_Content message to the DED, based on whether the at least one data packet was authorized to be downloaded to the workstation.

11. (Original): The system, as set forth in claim 1, wherein the DED includes Field Programmable Gate Arrays (FPGAs).

12. (Original): The system, as set forth in claim 11, wherein the FPGAs can be reprogrammed over the network to perform a content matching function.

13. (Original): The system, as set forth in claim 11, wherein a portion of the DED can be dynamically reprogrammed and the DED is operable to continue processing the data packets during the partial reprogramming.

14. (Original): The system, as set forth in claim 1, further comprising a Central Storage and Backup System (CSBS) operable to communicate with the RTP, to monitor operation of the RTP, and to store transaction information.

15. (Original): The system, as set forth in claim 14, wherein the CSBS is operable to transmit information to reprogram the DED to communicate with another RTP.

16. (Original): The system, as set forth in claim 1, further comprising a content matching server operable to store content match information, to communicate with the DED, and to transmit the content match information to the DED.

17. (Original): The system, as set forth in claim 1, wherein the DED is operable to suspend transmission of the data packets through the information network until a response to a prompt is received.

18. (Previously presented): A method for controlling transmission of identifiable content over an information network, comprising:

providing content match information for the content to a DED, wherein the DED is located in the information network along a transmission path of a plurality of data packets, wherein at least one data packet includes the content match information;

receiving the at least one data packet in the DED;

detecting the content match information in the at least one data packet in the DED;

issuing a prompt to a workstation based on the content match information when the content match information is detected in the at least one data packet; and

preventing further transmission of the one or more data packets based on the content match information.

19. (Original): The method as set forth in claim 18, wherein the prompt is based on the content match information.

20. (Canceled)

21. (Original): The method, as set forth in claim 18, further comprising: processing a transaction based on a user's response to the prompt.

22. (Original): The method, as set forth in claim 18, further comprising transmitting a message among a plurality of DEDs along the transmission path to prevent transmitting more than one prompt for the same data packet.

23. (Original): The method, as set forth in claim 18, further comprising: processing a transaction based on the content match information, and transmitting a Release_Content or Cease_Content message to the DED based on whether content was authorized to be downloaded to the workstation during the transaction.

24. (Original): The method, as set forth in claim 18, further comprising: reprogramming a portion of the DED to detect different content match information.

25. (Original): The method, as set forth in claim 18, further comprising suspending transmission of the at least one data packet through the information network until a response to the prompt is received.

26. (Original): A computer program product comprising: program instructions to implement the method of claim 18.

27. (Original): A data signal comprising: program instructions to implement the method of claim 18.

28-53. (Canceled)

54. (New): The system, as set forth in claim 1, wherein the DED is further operable to search the data packets for the content match information to determine whether transmission of data packets associated with a particular piece of content should be restricted, and, if transmission of associated data packets is restricted, then control information is used by the RTPs to determine which transaction(s) to process to control transmission of the data packets.

55. (New): The system, as set forth in claim 1, wherein a content provider supplies transaction instructions to be used in the RTP when the DED matches the content match information in a data packet.

56. (New): The system, as set forth in claim 55, wherein the instructions include transmitting a transaction prompt to the workstation informing a user of a price to be paid for content in the packets, and allowing the user to accept or decline purchase of the content.

57. (New): The system, as set forth in claim 55, wherein the instructions specify transmitting a prompt to inform a user that content infected with a virus is attempting to be transmitted from or received by the workstation and that transmission or reception of the virus is being halted.

58. (New): The system, as set forth in claim 55, wherein the instructions include specify transmitting a prompt to inform a user that content subject to security control is attempting to be transmitted from or received to the user's workstation 114, and that transmission or reception of the confidential content is being halted.

59. (New): The system, as set forth in claim 55, wherein As a further example, the RTP 128 can tally statistics regarding transmission of designated content for purposes such as rating the popularity of the content.